

March 6, 2014

Letter – Expression of Interest VIA ECFS

Chairman Thomas Wheeler Commissioner Mignon Clyburn Commissioner Jessica Rosenworcel Commissioner Ajit Pai Commissioner Michael O'Rielly Marlene Dortch Federal Communications Commission 445 12th Street, SW 20024 Washington, DC

> Re: Expression of Interest – Rural Broadband Experiments Connect America Fund, WC Docket No. 10-90

Dear Chairman Wheeler, Commissioners, and Ms. Dortch:

This letter is to express The Port District of Whitman County's ("The District") interest in receiving funding from the Rural Broadband Experiments announced at the January 30th FCC Open Meeting.

History

Situated in the southeastern corner of Washington, the Port District of Whitman County encompasses the entire county (Figure 1). The District includes three on-water port/industrial sites (Almota, Central Ferry & Wilma) and off-water sites located in Pullman and Colfax.

Washington law empowers port districts with broad economic development authority to bring business and jobs to their communities. Almost every Washington port pursues an aggressive program of industrial and economic development to promote employment and otherwise enhance the economy of the state and district. Some ports deal with all aspects of the subject, others with only one or two. Ports may:

- Develop lands for industrial and commercial needs
- Provide general economic development programs
- Buy, lease and sell property
- Promote tourism
- Provide air and water pollution control works
- Operate trade centers and export trading companies
- Establish and operate foreign trade zones
- Build telecommunications infrastructure and provide wholesale telecommunications services



In 1995, The District's Commission amended the 1990 comprehensive plan consolidating several goals and objectives. The amendment also added elements to the plan that included off-water rural county industrial development, a stronger commitment to the support of a multi-modal transportation system, and the beginning of a plan to encourage the advent of telecommunications services in rural Whitman County.

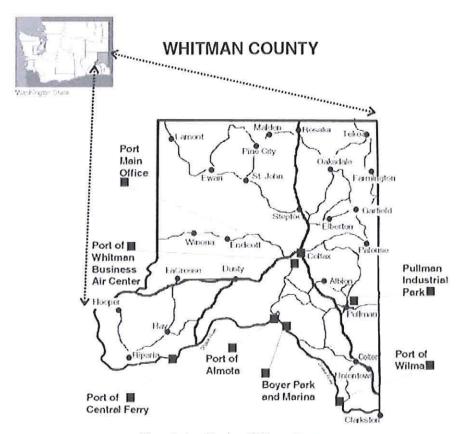


Figure 1: Port District of Whitman County



The District's Current Network and Services

The Port District of Whitman County was a recipient of Round 1 grant funding under the Department of Commerce's Broadband Technology Opportunities Program. The District's portion of this funding was approximately \$12.8 million and was utilized to expand middle-mile fiber-optic infrastructure in the rural areas of the County and connecting the cities of Colfax, Rosalia, Garfield, Oakesdale, Palouse, Pullman, Colton and Uniontown (Figure 2).

The primary purpose of the grant funding was to provide new broadband access to targeted medical facilities and libraries in Whitman County and a new source of middle-mile capacity in the region. The new fiber-optic infrastructure successfully linked these facilities to regional and statewide hubs, allowing advanced telecommunication services to provide benefits to research, learning and health applications locally. The network implements open-access, non-discrimination and interconnection, in compliance with the NTIA BTOP grant guidelines and currently supports multiple private service providers who utilize the District's network for transport across the region.

Currently, the District leases dark fiber to CenturyLink, NoaNet, Noel Communications, First Step, Washington State University, University of Idaho, Startouch, and various other Internet service providers. These providers serve businesses, schools, hospitals, universities, and libraries in Whitman County as well as Spokane, and Asotin counties. These organizations are benefiting from the advanced broadband services afforded by this middle-mile infrastructure.

Existing Broadband Environment and Statement of Need

Current broadband infrastructure in Whitman County communities is limited to aging copper systems that exceed the distance limitations of all but the slowest DSL services. Several small cable operators in the region managed coaxial plants, but these organizations have ceased operations and abandoned their infrastructure. The residents, businesses and community anchor organizations continue to suffer from inadequate services and remain cut-off from necessary broadband services. The remote nature of these communities makes it even more important for their citizens to have access to reliable, high-speed Internet services to support their needs for information, education, healthcare and safety. There are no planned investments by local providers to upgrade the infrastructure; therefore the citizens of these communities will have no way to participate in the broadband-enabled world.



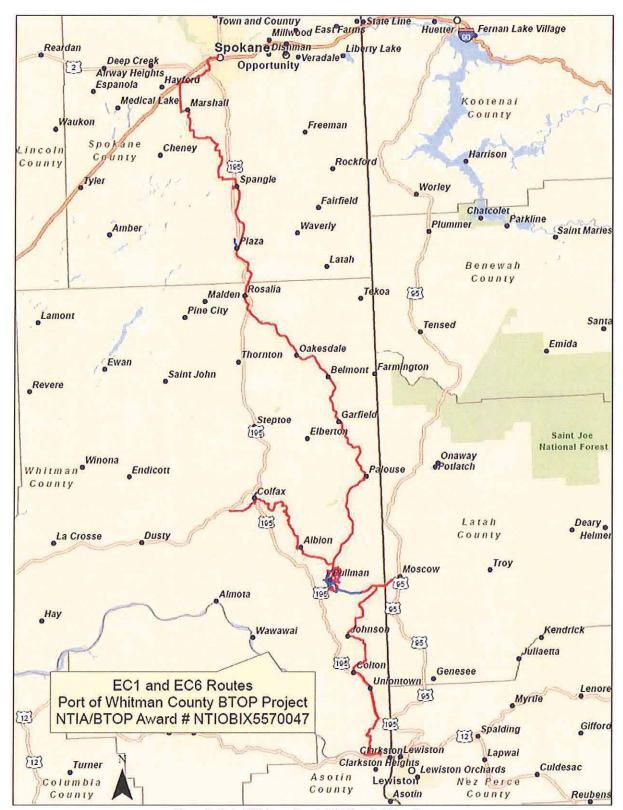


Figure 2: Port of Whitman County Middle-mile Network



Proposed Last-Mile Infrastructure

In continued effort to fulfill its mission, the District has developed a strategic plan to expand access to broadband services in its region. The middle-mile project provided important new backbone capacity and successfully connected service providers and community anchor organizations to a new high-speed network. However, Whitman County suffers from significant local access issues that prevent residents from taking advantage of this upgraded capacity. In essence, it is an "on ramp" problem; only marginal local access is available to connect to The District's high-speed middle-mile network. The region suffers from insufficient wireline broadband access and because of the rural environment; current service providers have planned no investments to upgrade this existing access infrastructure.

To address the local access issue, The District has developed a strategic plan to build last-mile infrastructure in the region, with the goal of enabling expanded broadband services in its underserved and unserved communities. Over the past 12 months, The District has developed an engineering design, financial plan and business strategy to implement the network covering approximately 1,000 homes, 100 businesses and 32 community anchors. This last-mile infrastructure will interconnect with The District's middle-mile system to provide end-to-end broadband connectivity into rural communities. Utilizing GPON fiber-to-the-premise technology, the network will provide new broadband services where only dialup, satellite and marginally available fixed wireline broadband services exist today.

Similar to The District's current network, the new last-mile infrastructure will utilize open-access to allow competitive service providers to deliver Internet, voice, video and other content to residents, businesses and community anchor institutions. The District has already been successful in its implementation of open-access in its middle-mile network and will expand this business model to include these new communities that are served by the last-mile infrastructure. Service providers currently connected to The District's middle-mile network will have the opportunity to deliver their services to residents, businesses and community anchor organizations connected to the last-mile infrastructure.

Preliminary engineering designs for last-mile infrastructure have been completed in the following rural communities served by the District:

- City of Colfax
- City of Garfield
- Town of Oakesdale
- City of Palouse
- Town of Rosalia

- Town of Colton
- Uniontown
- Rural and Unincorporated Whitman County

To date, The District has not been able to secure funding for this project through its own channels. This Expression of Interest is requesting that the FCC approve the funding of this last-mile infrastructure, which will provide broadband access to 1,000 rural households, 100 local businesses and 41 community anchor organizations. By funding this project, the FCC will fulfill the objectives of the Connect America Fund and simultaneously increase the effectiveness of The District's companion BTOP Round 1 grant.



Geographic Territory

The following qualified census tracts have been identified within the District's region and for which last-mile infrastructure will be constructed to serve customers within these geographies.

Area of District	Eligible Census Tract					
City of Colfax	53075000800					
Unincorporated Whitman County	53075000800					
City of Garfield	53075000700					
Town of Oakesdale	53075000700					
City of Palouse	53075000700					
Unincorporated Whitman County	53075000700					
Town of Rosalia	53075000900					
Unincorporated Whitman County	53075000900					
Town of Colton	53075001000					
Uniontown	53075001000					
Unincorporated Whitman County	53075001000					

Figure 3 depicts the existing middle-mile network in each community listed above and represents the primary areas of focus for CAF last-mile funding:

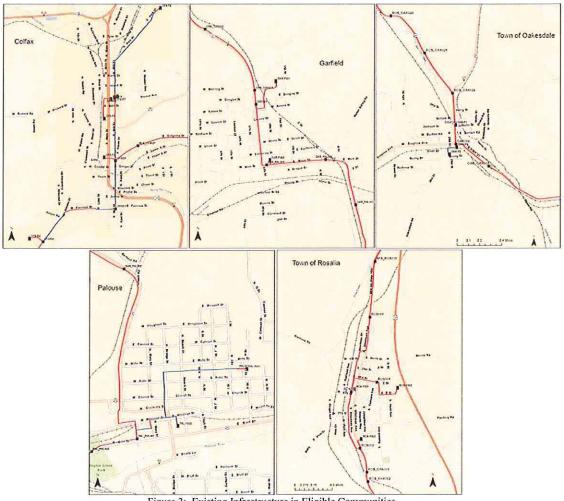


Figure 3: Existing Infrastructure in Eligible Communities



Eligible Telecommunications Carrier (ETC) Status

The District of Whitman County is currently not designated as an Eligible Telecommunications Carrier (ETC) and is currently exempt under the guidelines presented by the State of Washington's Utilities and Transportation Commission (WUTC). The District has begun discussions with the WUTC as well as the Washington State Attorney's office with regard to obtaining the ETC designations for purposes of the Connect America Fund should funds be awarded to the District.

List of Anchor Institutions

The Port of Whitman County will utilize Connect America Fund funding to connect the following Community Anchor Institutions within its district.

City Offices

- Colfax City Hall
- Colfax Water Department
- Colfax Fire Department
- Driver's License Office Colfax
- State Patrol Office Colfax
- Transportation Department Colfax
- US Consolidated Farm Services Agency Colfax
- Whitman County Assessor
- Whitman County Auditor
- Whitman County Commissioners Office
- Whitman County Courthouse
- Whitman County District Court
- Whitman County Jail
- Whitman County Shop
- Whitman County Road Department
- Oakesdale City Hall
- Garfield Town Offices
- Garfield City Clerk
- Garfield Sewer Plant
- Palouse City Hall
- Palouse Chief of Police
- Rosalia City Hall
- Rosalia Police Department
- Rosalia Fire Department
- Colton Town Hall
- Colton Police Department
- Colton Utilities
- Uniontown Town Hall

Schools

- Leonard M Jennings Elementary School
- Colfax School District
- Oakesdale Elementary and High School
- Rosalia Elementary and High School
- Palouse at Garfield Middle School
- Garfield School District
- Garfield Elementary and Middle School
- Colton School
- Colton School District

Healthcare

 Whitman County Health Department Colfax

Community Centers

- Colfax Chamber of Commerce
- Palouse Chamber of Commerce



Proposed Technology

The District will provide last-mile fiber-optic infrastructure to service providers who will deliver high-speed Internet and other services to customers within the eligible service area. This last-mile infrastructure will provide important local fiber access to interconnect the District's middle-mile fiber-optic network to customers in the local communities. Where the BTOP Round 1 grant provided critical middle-mile fiber-optic infrastructure to these communities, CAF funding will provide the last-mile fiber-optic infrastructure to interconnect the network to individual homes, businesses and community anchor organizations. This will increase the effectiveness and benefits of grant funding to the communities served by the District.

The project will implement a GPON fiber-to-the-home architecture utilizing splitter technology to provide connectivity to customers within the service area. The new infrastructure will be composed of distribution network components that terminate in fiber distribution hubs within each service area. Fiber distribution hubs will contain passive 1x32 splitters to interconnect with drop fibers that will be run to each customer.

Equipment cabinets will contain GPON Optical Line Terminals ("OLTs") to interconnect with the splitter network. Each home will be equipped with an Optical Network Terminal ("ONT") that receives a single strand of fiber and provides connection back to the local OLT. OLTs will maintain redundant 1 or 10 Gigabit connections to The District's middle-mile transport equipment. This will be the demarcation point between the existing middle-mile network and the new CAF-funded last-mile infrastructure. At this point of interconnection, services will be transported across The District's middle-mile network and will interconnect with service providers, who will provide all end-user services to customers in the project.

The District will partner with competitive service providers that desire the use of infrastructure to provide end-user services to customers in the project. The District's new last-mile infrastructure will provide an incentive for competitive service providers to reach the Whitman County market. The District will work with service provider partners to define bandwidth tiers for customers' services, based on their needs and the needs of the customers. Monthly recurring fees will be charged by The District to service providers for use of last-mile connections to customers. These fees will utilize a wholesale rate structure similar to a "Type-II" carrier model, whereby the carrier charges a monthly recurring fee for the use of a transport service reaching an end customer. The underlying GPON infrastructure will be able to provide an average of 80 Mbps downstream and 40 Mbps upstream to each customer, depending on the services delivered to each home and packages to which each home subscribes. This bandwidth may be split between multiple services, such as video, voice and high-speed Internet, which will depend on each competitive service provider's packages to end users.

State and/or Local or Tribal Government Participation in and/or Support for Project

The Port of Whitman County's fiber infrastructure on its southern end extends to Clarkston, WA. The Port operates a telecommunications hut at this location adjacent to two other carriers where there are meet-me vaults allowing connection to the port network. The Port offers all carriers, Internet Service Providers, and broadband providers colocation space and dark fiber (for lease) as their business needs expand. The presence of Port network infrastructure in this region has the afforded the Port the opportunity to partner with two tribal governments, the Nez Perce Tribe, located near Lewiston, ID and the Coeur d'Alene Tribe in Tekoa, WA.



The Nez Perce Tribe is in the process of building a fiber optic network for both internal needs and to operate as a business enterprise. The tribe will be involved in a joint build with the Port of Whitman County and will utilize co-location space in the Port's Clarkston facility as their primary meet-me point. This interconnect will provide the tribe access to a minimum of eight CLECs and one incumbent telecom provider to purchase broadband services and provide cross connect capabilities to support their enterprise operations.

With the successful award of this upcoming Connect America Fund application, the Port will be extend its network to Tekoa, WA where we have agreements to cross connect with the Coeur d'Alene Tribe. This will provide the Coeur d'Alene Tribe and their enterprise business, Red Spectrum Communications, a redundant route to the major cross connect facility in eastern Washington located in Spokane. Currently the Coeur d'Alene tribe is completing a build to the Liberty Lake Internet Exchange. The redundant route to the US Bank building in downtown Spokane will offer competitive pricing while providing for more choices to cross connect and greater network redundancy.

Existing Providers

The services and speeds represented in the chart below are the maximum available published speeds from each provider. Although these speeds are published as available in our district, speeds advertised are only realized in a very small percentage of households and businesses. The actual service delivered also varies substantially from community to community with the highest tier of service is not available in the majority of the communities we represent.

Incumbent Provider	Max Down/Up Speeds	Technology	Price	
Frontier DSL	24/1 Mbps	DSL	\$55	
First Step Wireless	4/1 Mbps	WiFi	\$80	
Cactus Internet	1.6/.4 Mbps	DSL	\$20	
Cascades Computing	10/2 Mbps	WiFi	\$120	

Currently, there is no cable Internet service available in any of our proposed service areas as all providers have ceased operations and abandoned any existing infrastructure and customer base.

Scalability

The District's network will be built to accommodate current needs but engineered for long-term scalability. The project will provide last-mile fiber-optic infrastructure to customers in the proposed service area. It will utilize GPON architecture to deliver an aggregate 2.5 Gigabits down / 1.25 Gigabits up to every 32 homes. The GPON network can be optimized to deliver greater bandwidths to each home by reducing the number of homes connected to each splitter. In addition, the network will be built to support emerging 10G-PON technologies, which will deliver 4 times greater bandwidth to each home than the initial GPON deployment. Further, the outside plant network will be engineered to accommodate Active Ethernet subscribers, allowing for future upgradeability to 1 and 10 Gigabit Ethernet services, if required.

Total Business Investment

Total business investment in the project is projected to be \$5,593,191 as more fully described in the "Investment Needed" section below.



Investment Needed

The project will require \$5,093,191 in funding for capital costs as listed in the table below. The District also anticipates a \$500,000 in project management, grant compliance and working capital funding to complete the project. Therefore, overall investment needed for the project is \$5,593,191. Figure 4 provides a breakdown of the major capital costs by community.

Network Costing Analysis Total Capital Costs				Rosalia		Oakesdale	Garfield		Palouse		Tekoa
			KOsalia		Cakesdale		Garriela		raiouse		ICKOB
Total Make Ready Costs			\$	13,552	\$	14,432	\$ 16,984	\$	22,440	\$	24,684.0
Total Fiber Construction Costs			\$	332,775	\$	1,240,326	\$ 365,270	\$	590,382	\$1	,499,420.20
Total FDH Costs			\$	3,800	\$	2,850	\$ 6,552	\$	5,550	\$	6,105.0
Total Pedestals Costs			\$	3,754	\$	2,586	\$ 2,271	\$	6,930	\$	7,623.0
Total Splitter Costs			\$	1,113	\$	777	\$ 735	\$	1,995	\$	2,194.5
Total Optical Network Terminals (ONTs) Costs			\$	81,510	\$	56,145	\$ 49,305	\$	150,480	\$	165,528.0
Total Inside Prem Wiring			\$	19,305	\$	13,298	\$ 11,678	\$	35,640	\$	39,204.0
Total Optical Line Terminals (OLTs) Costs	\$	296,000									
Total Capital Costs	\$	296,000	\$	455,809	\$	1,330,413	\$ 452,794	\$	813,417	\$	1,744,759

Figure 4: Network Capital Costs

Leveraging Funds

This project provides a significant opportunity to create mutual benefit between The District's original Broadband Technology Opportunities Program Round 1 grant and proposed Connect America Fund dollars. Where the BTOP grant successfully expanded middle-mile capacity in Whitman County, Connect America Fund dollars will close gaps in last-mile infrastructure by deploying new fiber-optic infrastructure where insufficient wireline broadband services exist today. And, because both projects implement true open-access, customers who receive these new broadband services will have greater choice of providers in an open market environment; improving the competitive landscape and affordability for the residents of Whitman County.

Total Project Cost

The total project cost for the District's proposed project is \$5,593,191.

Thank you for considering our Expression of Interest in your decision about the amount of funding that will be allocated in the Rural Broadband Experiments. We commend the FCC in this effort to connect rural communities and are ready to help you close the digital divide.

Joseph R. Poiré Executive Director

Port of Whitman County